Indiana Department of Environmental Management
Office of Water Quality
Wetlands Section

Publication Date:
February 24, 2009

Closing Date:
March 16, 2009

PUBLIC NOTICE

IDEM ID Number:
2009-031-02-BCB-A

Corps of Engineers ID Number:
LRE-2008-01159-102

To all interested parties:

This letter shall serve as a formal notice of the receipt of an application for **Section 401 Water Quality Certification** by the Indiana Department of Environmental Management (IDEM). The purpose of the notice is to inform the public of active applications submitted for water quality certification under Section 401 of the Clean Water Act (33 U.S.C. § 1341) and to solicit comments and information on any impacts to water quality related to the proposed project. IDEM will evaluate whether the project complies with Indiana's water quality standards as set forth at 327 IAC 2.

1. Applicant:
Mr. Dan Mendiola
YRC North American Transportation
1077 Gorge Boulevard
Akron, OH 44310

2. Agent:
Mrs. Alicia Douglass
Davey Resource Group
3846 New Vision Drive
Fort Wayne, IN 46845

3. Project location: SE ¼ of Section 17, Township 31 North, Range 12 East, Huntertown U.S.G.S. Quad, Allen County. Located at 4222 Merchant Road, Fort Wayne, IN.

4. Affected waterbody: 0.855 acre of a 0.983 acre jurisdictional forested wetland

5. Project Description: The applicant proposes to discharge approximately 2,990 cubic yards of clean earthen fill into 0.855 acre of a 0.983 acre jurisdictional forested wetland. The purpose of the project is to expand the existing freight terminal by constructing a dock addition with concrete pads on either side on the north side of the existing building, and an office addition on the south side of the existing building. A storm water pond will be excavated in wetlands on the west side of the site, and will overflow into existing wetlands on the northwest side that continue off-site. The remainder of the undeveloped portion of the site with the exception of 0.13 acre of wetland will be filled and paved in order to facilitate enough room for parking, and maneuvering trucks and equipment. To mitigate for the wetland fill, the applicant proposes at a 4 to 1 ratio to construct through restoration and establishment a minimum of 3.42 acres of forested wetland on a 3.89 acre site located in the Saint Marys Watershed, southwest of the intersection of Engle Road and Clubview Drive in Fort Wayne, in the NW ¼ of Section 20, Township 30 North, Range 12 East, Fort Wayne West U.S.G.S. Quad. For additional plans, please refer to the IDEM, Section 401 Public Notice webpage at http://www.in.gov/idem/4400.htm

Comment period: Any person or entity who wishes to submit comments or information relevant to the aforementioned project may do so by the closing date noted above. Only comments or information related to water quality or potential impacts of the project on water quality can be considered by IDEM in the water quality certification review process.

Public Hearing: Any person may submit a written request that a public hearing be held to consider issues related to water quality in connection with the project detailed in this notice. The request for a hearing should be submitted within the comment period to be considered timely. The request should also state the reason for the public hearing as specifically as possible to assist IDEM in determining whether a public hearing is warranted.

Questions? Additional information may be obtained from Mr. Brad Baldwin, Project Manager, at 317-234-5647. Please address all correspondence to the project manager and reference the IDEM project identification number listed on this notice. Indicate if you wish to receive a copy of IDEM's final decision. Written comments and inquiries may be forwarded to -

Appendix B
Location of Project Site on Highway Map

Site Location: 7.4 Acres, 4222 Merchant Road
Fort Wayne, Indiana
Source: ESRI
Redlands, California

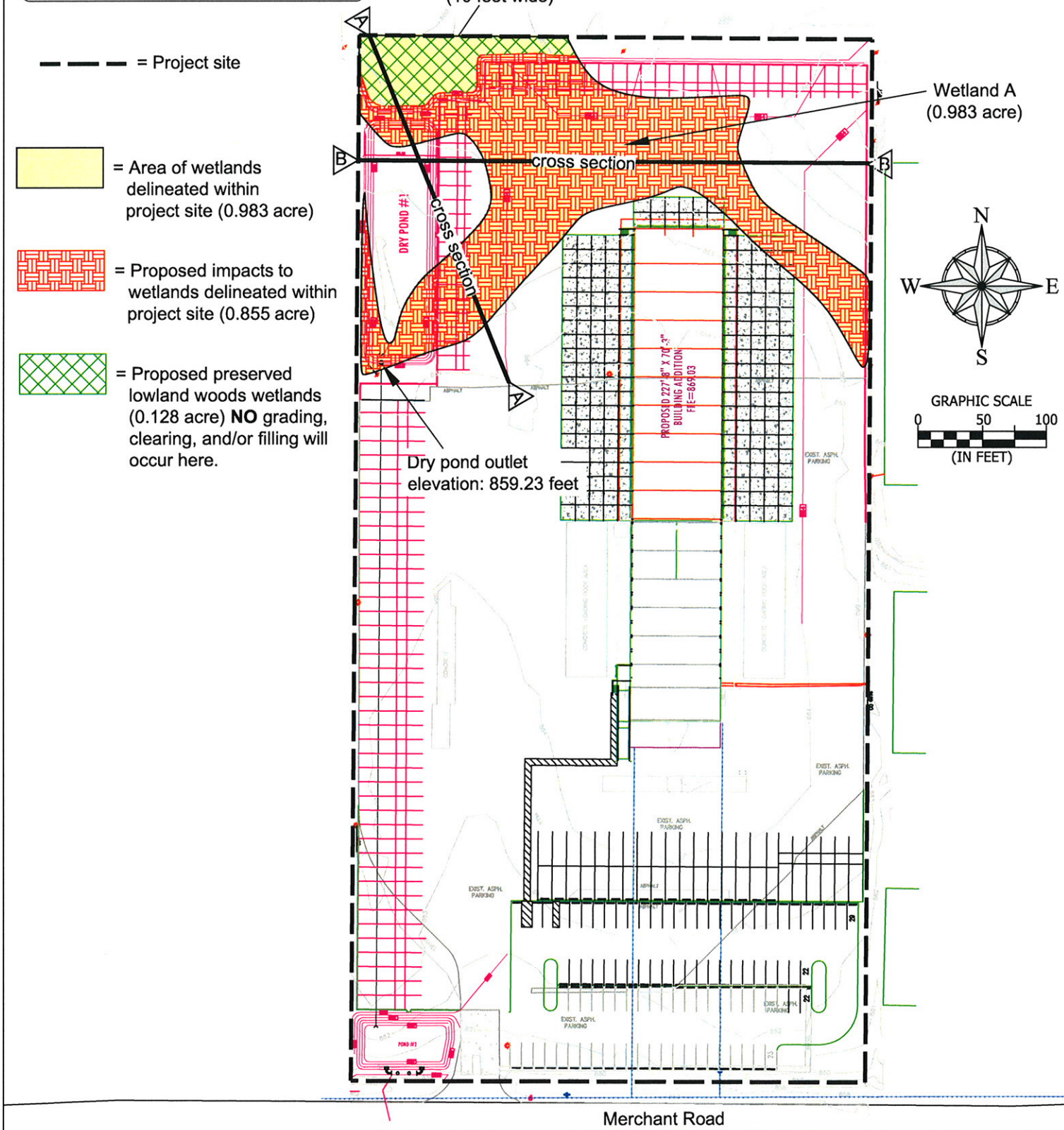
Prepared for
Ray Fogg Building Methods, Inc.

YRC, Inc.
7.4 Acres, 4222 Merchant Road
Fort Wayne, Indiana

Prepared by
DAVEY RESOURCE GROUP
A Division of The Davey Tree Expert Company

Data used to produce this map were collected on October 29, 2008 and January 23, 2009

Appendix H-1
Proposed Impacts



Prepared for
Ray Fogg Building Methods, Inc.

YRC, Inc.
7.4 Acres, 4222 Merchant Road
Fort Wayne, Indiana

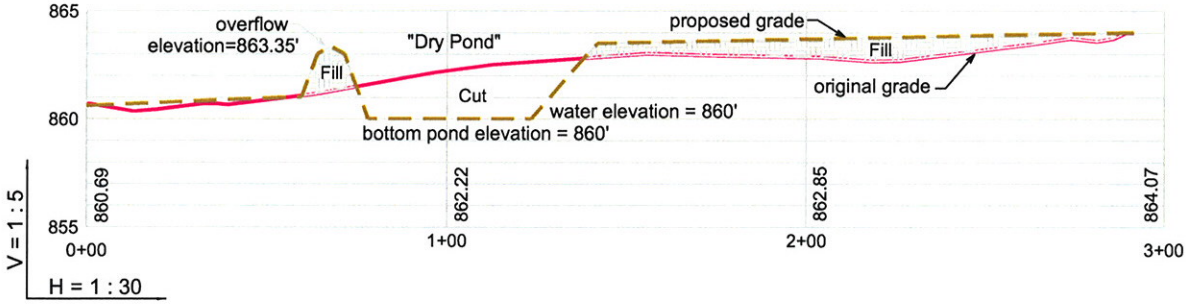
Prepared by
DAVEY RESOURCE GROUP
A Division of The Davey Tree Expert Company

Data used to produce this graphic were provided on January 26, 2009

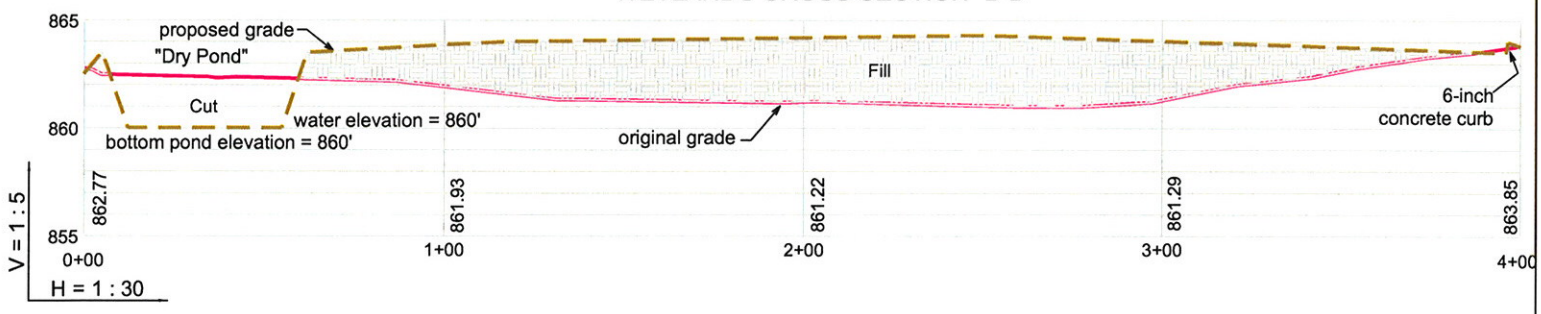
Appendix H-2
Proposed Impacts

YRC, Inc. - Wetlands Fill and Cut Volume Table (determined by: Anderson Surveying, Inc.)		Rev.	1/26/2009
Wetlands Fill Volume			
Surface	**Area (sq . ft.)**	**Depth (ft.)**	**Volume (cu. ft.)**	**Volume (cu. yds.)**
earth fill	30375	varies	44280	1640
asphalt	30375	0.33	10125	375
concrete	873.5	0.67	582	22
stone (10-inch)	30375	0.83	25313	938
stone (6-inch)	873.5	0.50	437	16
		Total		**2990**
Wetlands Cut Volume			
	Area (sq. ft.)	**Depth (ft.)**	**Volume (cu. ft.)**	**Volume (cu. yds.)**
north end of pond	483	2.0	966	36
south end of pond	2556	3.5	8946	331
		Total		**367**

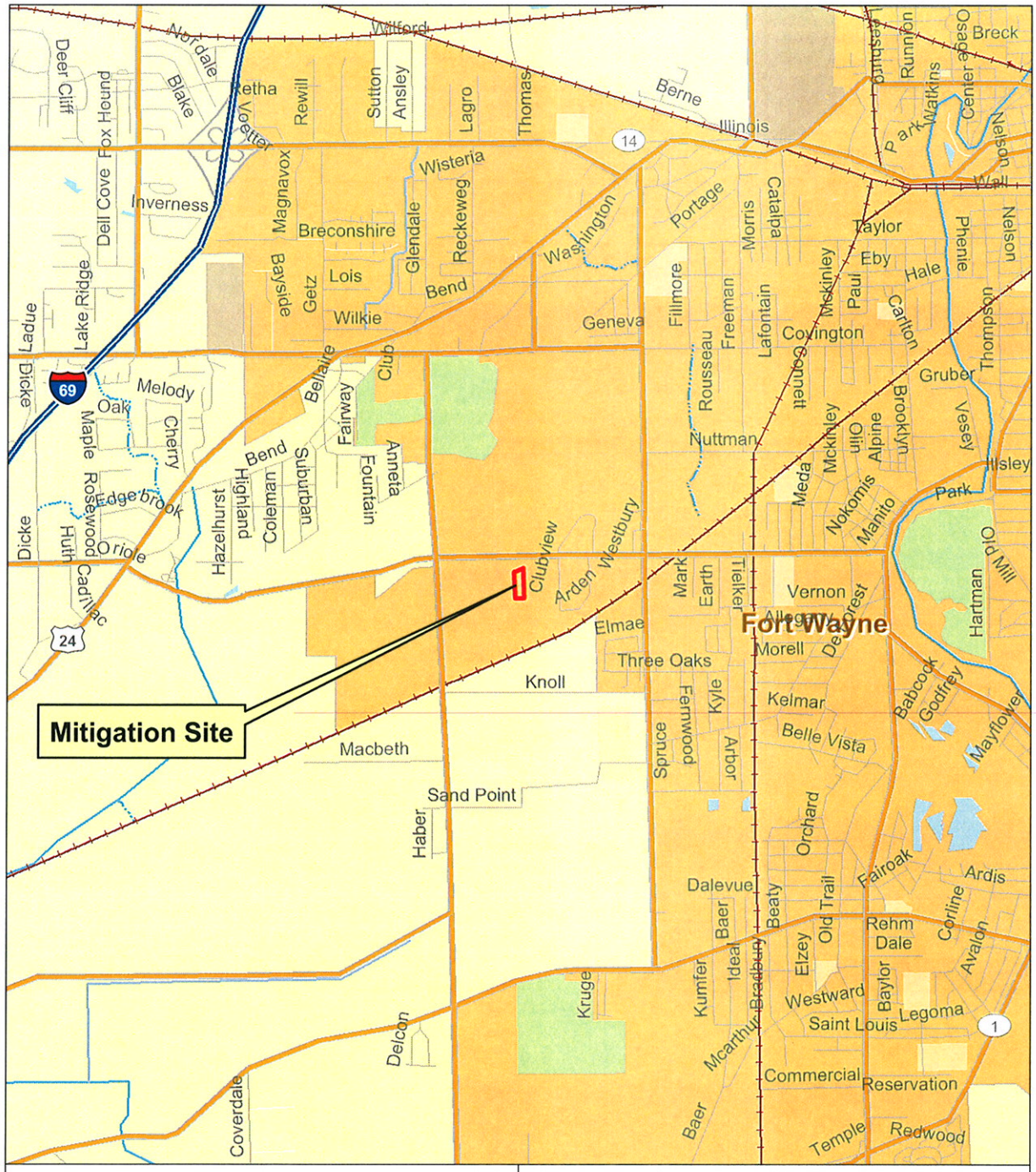
WETLANDS CROSS SECTION "A-A"



WETLANDS CROSS SECTION "B-B"



Appendix C
Location of Mitigation Site on Highway Map



N
W E
S

0.5 0.25 0 0.5 1
Miles

Site Location: 3.89 Acres
YRC, Inc. Mitigation Site
Engle Road, Fort Wayne, Indiana

Source: ESRI
Redlands, California

Prepared for
Ray Fogg Building Methods, Inc.

3.89 Acres, YRC, Inc. Mitigation Site
Engle Road
Fort Wayne, Indiana

Prepared by
DAVEY RESOURCE GROUP
A Division of The Davey Tree Expert Company

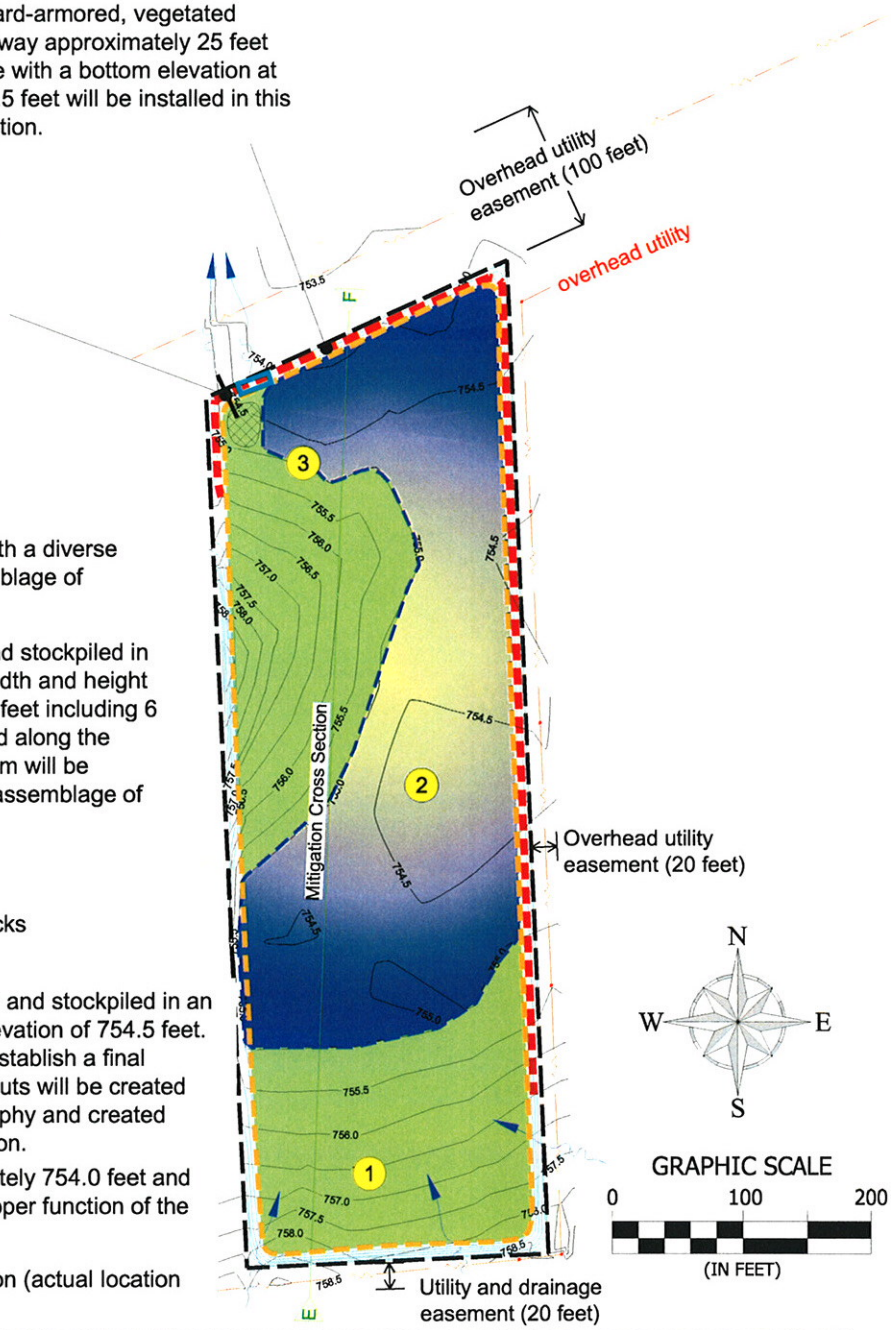
Data used to produce this map were collected on January 22, 2009

Engle Road

Appendix O
Off-Site Mitigation Plan

A hard-armored, vegetated spillway approximately 25 feet wide with a bottom elevation at 755.5 feet will be installed in this location.

An Inline Water Level Control Structure™ will be utilized for hydrology manipulation following tree and shrub installation to aid in vegetation establishment. Once woody vegetation is established the water elevation will be set to obtain the desired wetlands hydrology regime and only utilized for maintenance purposes.



— — — = Project area (3.89 acres)

= Direction of flow

= The wetlands mitigation site will be seeded with a diverse wetlands seed mix and planted with an assemblage of hydrophytic trees. (3.42 acres)

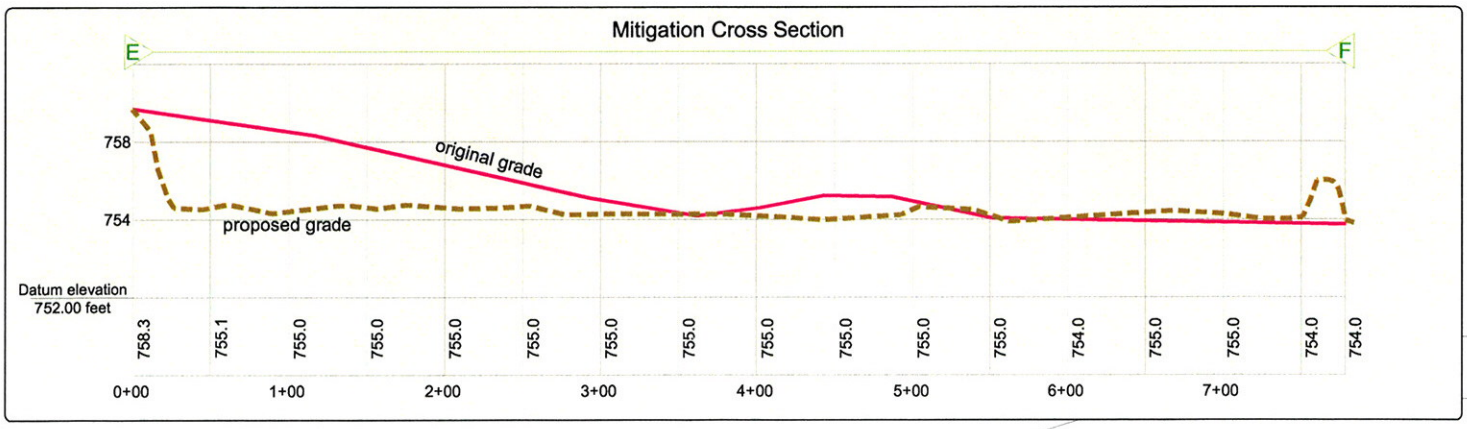
= Topsoil shall be removed from this location and stockpiled in an upland location. A berm undulating in breadth and height with a top elevation between 756.0 and 756.5 feet including 6 inches of topsoil on the surface will be installed along the northern and eastern edge of the site. The berm will be planted with a prairie seed mix and a diverse assemblage of shrubs. (940 linear feet)

= This area will not be excavated. Ruts will be created running east to west to establish microtopography and create elevated hummocks receptive to tree installation.

= All top soil shall be removed from this location and stockpiled in an upland location. This area will be cut to an elevation of 754.5 feet. A total of 6 inches of topsoil will be added to establish a final elevation of 755.0 feet throughout the area. Ruts will be created running east to west to establish microtopography and created elevated hummocks receptive to tree installation.

= Final elevation in this area will be approximately 754.0 feet and will be adjusted as necessary to allow for proper function of the water level control structure.

1 = Approximate monitoring quadrat point location (actual location will be field placed post construction).



The Huntertown Quadrangle of the National Wetlands Inventory (NWI) map, provided in Appendix F, shows one palustrine, forested, broad-leaved deciduous, seasonally flooded (PFO1C) wetlands on the northwest corner of the project site.

Soils for the project site include Blount silt loam (BmA), Morley silty clay loam (MrB2), and Pewamo silty clay loam (Pe). Pewamo is a hydric soil series. Mapped Natural Resources Conservation Service (NRCS) soils and complete soil descriptions are included in Appendix G.

Impacts to Wetlands A are necessary to expand the existing freight dock, increase the amount suitable area for equipment maneuvering and parking, and to create a stormwater pond (Appendix H). Wetland A is a palustrine, forested, broad-leaved deciduous, seasonally flooded (PFO1C) wetlands). The wetlands are dominated by *Acer saccharinum* (silver maple, FACW+[1]), *Quercus bicolor* (swamp white oak, FACW+), and *Ulmus americana* (American elm, FACW-). Other species present include *Acer rubrum* (red maple, FAC), *Fraxinus pennsylvanica* (green ash, FACW), and *Populus deltoides* (eastern cotton-wood, FAC+).

The primary function of Wetland A is floodwater abatement. It also provides wildlife habitat and contains species having wildlife nutritional value.

Wetlands Mitigation Site

The proposed off-site wetlands mitigation site encompasses 3.89 acres. It is located southwest of the intersection of Engle Road and Clubview Drive in Fort Wayne, Indiana. A map of Existing Mitigation Site Conditions can be found in Appendix J. The site is currently in agricultural production and has been planted annually. An analysis of historic aerial photographs indicates the site was farmed prior to 1938 to recent years (Appendix K).

American Electric Power overhead utility line easements border the mitigation site's northern and eastern boundaries. A utility and drainage easement borders the mitigation site on the south. A gravel access road forms the western boundary of the mitigation site. Property to the north of the proposed mitigation site is in agricultural production. An industrial park is located east of the mitigation site and is proposed to expand to the south of the mitigation site on land that has been prepared for development purposes. A road has been built to the south to facilitate expansion of the industrial park. To the west of the mitigation site is an undeveloped area containing mature trees and a segment of old river channel isolated by historic ditch creation.

The property is shown on the Fort Wayne West Quadrangle of the USGS map and has an elevation between 754.0 and 759.0 (Appendix L).

The Fort Wayne West Quadrangle of the NWI map is provided in Appendix M. One wetlands is mapped within the mitigation site boundary. The wetlands are labeled as a palustrine, emergent wetlands with an unknown to seasonally flooded/well-drained hydrologic regime (PEMUD). The site has been in agricultural use prior to 1938 to present day.

Soils for the wetlands mitigation site include Chelsea fine sand (ChB), Whitaker loam (HoA), Rensselaer loam (Rm) and Rensselaer mucky silty clay loam (Rn). Rensselaer is a hydric soil series. Mapped NRCS soils and a complete soil series description are included in Appendix N.

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[1] Please refer to Appendix I for a description of wetlands vegetation indicator status symbols.

Description of Mitigation Credits

One objective of the off-site mitigation project is to increase and compensate for floodwater storage within the same eight-digit HUC watershed by establishing and re-establishing a minimum of 3.420 acres of forested wetlands. A total of 0.855 acres of lowland woods were impacted on the project site and will be mitigated at a 4:1 ratio. The second objective of the mitigation site is to provide valuable wildlife habitat. The diversity of planted native vegetation species in the mitigation wetlands will provide natural habitat and nutritional value for wildlife. The proposed forested vegetative community will expand the size and variety of natural habitats in the mitigation site location by converting marginal agricultural land to wetlands. The mitigation site is adjacent to a natural forested area including wetlands and will offer a larger contiguous tract of natural area than the highly fragmented project site.

Mitigation Work Plan

Earthwork

The off-site mitigation plan can be found in Appendix O. Proposed earthwork at the wetlands mitigation site consists of the creation of an undulating, shallow earthen berm approximately 1.5 feet higher than the surrounding wetlands at its apex. The berm will run approximately 940 linear feet, along the northern and eastern edges of the mitigation site. Soil used to construct the berm will be subsoil, shallowly excavated from portions of the site having the highest elevations. The location of shallow excavation will be concentrated in the western and southern portions of the mitigation site that currently have elevations greater than 755.0 feet. A small portion of the northwestern corner of the site will be excavated to an approximate elevation of 754.0 feet to allow for the proper function of the proposed water level control structure.

Topsoil will be removed from the berm footprint and the locations to be shallowly excavated prior to subsoil excavation and construction of the berm. Topsoil will be stockpiled in an upland location and spread over the top of the berm and the shallowly excavated areas once earthwork in these areas is complete. Excess subsoil excavated from the site will be disposed of at an upland location. Shallow ruts running east to west created by heavy equipment during the mitigation site construction will be left ungraded so as to create mircotopographic features. After earthwork is complete, the site will be roughly disked to be receptive to seeding. The mitigation site will be seeded promptly after earthwork so as to minimize potential erosion on the site.

Hydrology

The mitigation site currently drains north into wetlands and a segment of an old river channel. The old river channel drains to Miller Drain # 3, which flows north to Junk Drain. Junk Drain flows northeast for several miles and debouches to the St. Marys River.

Precipitation events incident upon the mitigation site, as well as surface flow from the southern and eastern adjacent properties, will provide water to the mitigation site. The proposed shallow berm constructed along the eastern and northern boundary of the site will limit the movement of water and retain it in the mitigation area. To assure that no underground tiles are draining the mitigation site, a search will be conducted using a track hoe or similar piece of equipment to excavate a trench to a depth of at least four feet around the perimeter of the site. Tiles discovered in the search will be crushed and disabled. Once disabled, tile lines will be excavated for approximately six to eight feet inward from the trench and refilled to create compacted clayey soil plugs that will block the flow of water through the lines.

One Inline Water Level Control Structure™ is proposed to be installed within the berm in the northwestern corner of the mitigation site. This structure will allow for manipulation of the site water level for initial planting and maintenance purposes. Once the proper hydrological regime has been determined for the mitigation site, the water level control structure may be disabled to prevent further manipulation of the water level. The water level control structure will drain north to adjacent wetlands via a vegetated swale to be created adjacent to the access road. This wetlands drains to Miller Drain #3 which drains to Junk Drain that debouches to the St. Marys River.

A hard-armored vegetated overflow spillway will also be constructed within the northern berm. The spillway will be approximately 25 feet wide and constructed at an elevation of 755.5 feet. The spillway will drain north via overland surface flow to nearby wetlands. It will aid in draining excess water off the mitigation site as necessary.

Planting Plan

The goal of this project is to establish and re-establish a minimum of 3.420 acres of forested wetlands within the mitigation footprint (Appendix O). A surrounding upland shrub buffer will serve to protect the created wetlands. Furthermore, the adjacent utility easements on the northern, southern, and eastern boundaries of the site will serve as an extended buffer from future development.

All shrub and tree species planted will be native to the region. A minimum of 4 shrub species and 4 tree species shown in Table 2 will be planted to ensure a measure of species diversity on the site. Exact species planted will be dependent on availability at the time of planting. There will be approximately equal quantities of each shrub and tree species planted. Shrub species planted will consist of bare-root stock. Tree species will consist of a mixture of bare-root stock and 1- to 3-gallon containerized specimens. A minimum of 10 percent of trees planted will be containerized. Use of containerized stock will allow for a greater diversity in age and size class of trees planted. The more developed root system of containerized stock will result in a higher probability of survival. Containerized stock will predominantly consist of *Quercus* (oak) species. In order to achieve a minimum goal of 200 viable stems per acre in the forested mitigation area, with reasonable certainty 450 stems per acre will be planted. The density of trees will ultimately be dependent on post construction hydrology and designed habitat goals.

Table 2. Shrubs and Trees

Species[2]	Common Name	Indicator Status
Shrubs		
Amelanchier arborea	downy serviceberry	FACU
Amelanchier laevis	Allegheny serviceberry	UPL
Cornus drummondii	rough-leaf dogwood	FAC
Corylus americana	American hazelnut	FACU-
Hamamelis virginiana	witch-hazel	FACU
Lindera benzoin	spicebush	FACW-
Rhus glabra	smooth sumac	NI
Rhus typhina	staghorn sumac	NI
Sambucus canadensis	elderberry	FACW-
Viburnum dentatum	arrow-wood	FAC
Viburnum lentago	nannyberry	FAC+
Trees		
Acer rubrum	red maple	FAC
Alnus rugosa	speckled alder	OBL
Betula nigra	river birch	FACW
Carya laciniosa	big shellbark hickory	FACW
Cornus amomum	silky dogwood	FACW+
Cornus stolonifera	red-osier dogwood	FACW
Platanus occidentalis	sycamore	OBL
Quercus bicolor	swamp white oak	OBL
Quercus palustris	pin oak	OBL
Quercus shumardii	shumard oak	FACW-

[2] Species names and indicator statuses were obtained from Reed, 1988.

A custom seed mix consisting of an emergent, wet meadow and a forested wetlands mix (Table 3) will be planted over the entire mitigation wetlands area at a rate of 10 pounds per acre excluding cover crop. The seed mix will consist of approximately 50 percent of emergent, wet meadow and 50 percent of forested wetlands mix. The berm and any unvegetated area surrounding the wetlands mitigation site disturbed during construction will be planted with a basic prairie mixture (Table 4) at a rate of 10 pounds per acre excluding cover crop. The cover crop will consist of *Avena sativa* (common oat, UPL). All seeds in the emergent, wet meadow and forested wetlands seed mix are to be obtained from Spence Restoration Nursery and will be source identified local genotype seed guaranteed to be produced from stock originating from Indiana remnant native plant communities.

Table 3. Emergent, Wet Meadow, and Forested Wetlands Seed Mix

Species[3]	Common Name	Indicator Status
Graminoids		
Bromus latiglumis	tall brome	FACW-
Carex comosa	bristly sedge	OBL
Carex cristatella	crested sedge	FACW+
Carex frankii	Frank's sedge	OBL
Carex hystericina	porcupine sedge	OBL
Carex lurida	lurid sedge	OBL
Carex normalis	spreading oval sedge	FACW
Carex stipata	awl-fruited sedge	OBL
Carex tribuloides	pointed oval sedge	FACW+
Carex vulpinoidea	fox sedge	OBL
Cinna arundinacea	common wood reed	FACW
Elymus virginicus	Virginia wild rye	FACW-
Elymus riparius	Riverbank wild rye	FACW
Glyceria striata	fowl manna grass	OBL
Hystrix patula	bottlebrush grass	FACU
Leersia oryzoides	rice cut grass	OBL
Panicum virgatum	switchgrass	FAC+
Scirpus atrovirens	dark green bulrush	OBL
Forbs		
Actinomeris alternifolia	wingstem	FACW
Alisma subcordatum	water plantain	OBL
Angelica atropurpurea	angelica	OBL
Aster lateriflorus	side-flowering aster	FAW-
Aster novae-angliae	New England Aster	FACW
Aster puniceus	swamp Aster	OBL
Aster simplex	panicled aster	FACW
Aster umbellatus	flat-topped aster	FACW
Cassia hebecarpa	wild Senna	FACW
Eupatorium maculatum	spotted Joe-pye weed	OBL
Eupatorium perfoliatum	boneset	FACW+
Helenium autumnale	autumn sneezeweed	FACW+

[3] Species names were obtained from Spence Restoration Nursery seed mix lists. Indicator statuses were obtained from Reed, 1988. If a species was not listed in Reed, 1988, the species name was obtained from The PLANTS Database, 2008 and was assumed to have an UPL indicator status.

Forbs (Cont'd.)		
Heliopsis helianthoides	False sunflower	UPL
Liatris spicata	dense blazing star	FAC
Lobelia cardinalis	cardinal flower	OBL
Lobelia siphilitica	great blue lobelia	FACW+
Penstemon calysosus	smooth penstemon	FACU
Penstemon digitalis	foxglove beardtongue	FAC-
Pycnanthemum virginianum	mountain mint	FACW+
Rudbeckia fulgida speciosa	showy black-eyed susan	OBL
Rudbeckia hirta	black-eyed susan	FACU
Rudbeckia laciniata	green-headed coneflower	FACW+
Rudbeckia subtomentosa	sweet black-eyed susan	FACU+
Rudbeckia triloba	branched coneflower	FAC-
Silphium integrifolium	rosinweed	UPL
Silphium perfoliatum	cupplant	FACW-
Silphium terebinthinaceum	prairie dock	FACU
Solidago gigantea	late goldenrod	FACW
Solidago patula	swamp goldenrod	OBL
Solidago riddellii	Riddell's goldenrod	OBL
Verbena hastata	blue vervain	FACW+
Vernonia fasciculate	smooth ironweed	FACW
Veronicastrum virginicum	Culver's root	FAC
Zizia aurea	golden alexanders	FAC+

Table 4. Basic Prairie Mix

Species[4]	Common Name	Indicator Status
Graminoids		
Andropogon gerardii	big bluestem	FAC-
Bouteloua curtipendula	side-oats grama	UPL
Elymus canadensis	Canada wild rye	FAC-
Elymus virginicus	Virginia wild rye	FACW-
Schizachyrium scoparium	little bluestem	FACU-
Sorghastrum nutans	Indian grass	FACU+
Forbs		
Aster novae-angliae	New England aster	FACW
Cassia hebecarpa	wild senna	FACW
Echinacea purpurea	purple coneflower	UPL
Eryngium yuccifolium	rattlesnake master	FAC+
Heliopsis helianthoides	false sunflower	UPL
Monarda fistulosa	bergamot	FACU
Ratibida pinnata	yellow coneflower	UPL
Rudbeckia hirta	black-eyed susan	FACU
Silphium integrifolium	rosinweed	UPL
Solidago rigida	stiff goldenrod	FACU-

[4] Species names were obtained from Spence Restoration Nursery seed mix lists. Indicator statuses were obtained from Reed, 1988. If a species was not listed in Reed, 1988, the species name was obtained from The PLANTS Database, 2008 and was assumed to have an UPL indicator status.

The mitigation site may be slightly rutted by heavy equipment during earthwork, creating micro-topographic features that will include shallow depressions as well as small elevated areas. Consequently, the actual plan-view of vegetative communities will ultimately be determined by post construction hydrology. Planting will occur randomly, placing plants in their preferred habits to mimic a natural wetland ecosystem.

Planting Methods

Planting of woody vegetation will generally be performed by hand in early spring when soil conditions are suitable for planting. Some planting of larger stock may occur in the fall season as appropriate per species and soil conditions. Smaller bare-root stock will be planted in the spring to minimize frost heave. When possible, planting will occur while plants are still dormant and prior to budbreak. No soil amendments will be used or added during planting. Only organic fertilizers, water gels, biostimulants, and beneficial mycorrhizae fungi products, appropriate for each species and size of tree, will be used at the time of planting.

The goal is to recreate a natural ecosystem, therefore planting may not occur at regular spaced intervals, but will occur randomly. Each plant will be located according to that species' habitat preferences. For example, species tolerant of frequent wet soils such as *Alnus rugosa* (speckled alder, OBL) will be planted in the lowest, wettest locations. Species such as *Acer rubrum* (red maple, FAC) will be planted on slightly higher areas of microtopography within the wetlands.

Seed mixes will be planted with broadcast spreader followed by an application of straw mulch. Mulch will be applied at a rate of one to two tons per acre.

Maintenance Plan

Invasive Vegetation Control

The mitigation site will contain less than 15 percent combined areal vegetative cover of *Phalaris arundinacea* (reed canary grass, FACW+) and *Typha* spp. (cattail, OBL). If present, the following invasive, exotic plant species will be eradicated: *Lythrum salicaria* (purple loosestrife, OBL), *Myriophyllum spicatum* (Eurasian water-milfoil, OBL), and *Phragmites australis* (common reed, FACW+).

The site will be inspected for invasive species during routine monitoring of the forested wetlands. Targeted invasive species will be treated as necessary using Rodeo®, a broad-spectrum glyphosate herbicide labeled for wetlands use. Foliar application rates will be in accordance with label specifications. Low-volume, low-pressure foliar applicators will be used for spot treatment as necessary. These highly selective application techniques avoid damage to non-target species.

Following construction and planting, the delineation and reporting of invasive plant cover will occur in Years One, Three, and Six and the final monitoring year.

Vegetation

The average density of live wetlands tree species shall not be less than 200 stems per acre within the mitigation wetlands. Tree plantings will be examined during monitoring years requiring quantitative vegetation assessments. If the number of live tree plantings is found to be less than 200 stems per acre, a remedial planting or pest prevention plan will be developed to ensure the success of planting in the forested wetlands.

Hydrology

The mitigation wetlands surface area shall consist of no more than 10 percent open water, bare ground, or a combination of the two. The stage-management of berms and spillways can help manipulate the drainage on the mitigation site. An addition of a water overflow or spillway may allow excess water to leave the site while the expansion or creation of berms will avert the movement of water. Post-construction maintenance may also include manipulation of the water control structure to achieve the desired wetlands hydrology.

Hydrology will be monitored two times a year during years requiring quantitative hydrology assessments with the exception of Year One, where it will be monitored once. The manipulation of the water control structure will occur during yearly monitoring visits until biologists determine desired water level.

Performance Standards

The long-term goal of the wetlands mitigation site is to develop and manage the site such that high-quality wet meadow, scrub/shrub, and lowland woods are established and re-established over most of the mitigation area. To be considered successful, the mitigation wetlands must meet the following performance standards for two consecutive monitoring years. Monitoring will begin the first full growing season after installation.

1. A minimum of 3.420 acres of lowland woods complex shall be created as measured by a wetlands delineation. A wetlands delineation following the 1987 *Corps of Engineers Wetland Delineation Manual* and the 2008 *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* will be performed in the final year of monitoring.
2. Greater than 50 percent of the dominant vegetation species within the mitigation wetlands shall have a wetland indicator of FAC or wetter.
3. Hydrology at the mitigation wetlands shall meet the wetlands hydrology criteria contained in the 1987 *Corps of Engineers Wetlands Delineation Manual* and the 2008 *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region.*
4. The combined surface areal coverage of *Phalaris arundinacea* (reed canary grass, FACW+) and *Typha* spp. (cattail, OBL) shall not exceed 15 percent of the mitigation wetlands.
5. The mitigation wetlands will be free of the following invasive, exotic species: *Lythrum salicaria* (purple loosestrife, OBL), *Myriophyllum spicatum* (Eurasian water-milfoil, OBL), and *Phragmites australis* (common reed, FACW+).
6. The mitigation wetlands shall have a minimum areal cover of 70 percent native plant species excluding *Typha* spp. (cattail, OBL).
7. The mitigation wetlands surface area shall consist of no more than 10 percent open water, bare ground, or a combination of the two.
8. The average density of live wetland tree species shall not be less than 200 stems per acre within the lowland woods mitigation wetlands.